



National Center for Urban School Transformation



SAN DIEGO STATE
UNIVERSITY

Mathematics Success in Title I Schools

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National Center for Urban School Transformation

U.S. Department of Education Mathematics Meeting

May 15, 2008

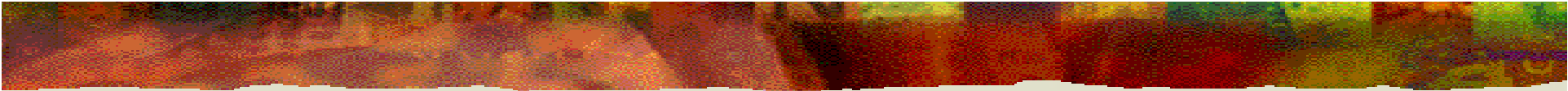
Baltimore, Maryland

National Center for Urban School Transformation

Dedicated to identifying, studying, and promoting the best practices of America's highest achieving urban schools in a manner that supports urban districts in transforming teaching and learning

<http://www.ncust.org>

4th Annual Symposium: May 7th & 8th, 2009 in San Diego



NCUST Recognizes & Studies Urban Schools that Achieve Atypical Results

- Majority of students meet low-income criteria and no selective admissions criteria; yet:
- Higher achievement than state average and higher than 90 percent of similar schools
- Small or no achievement gaps
- Exceed AYP criteria for at least two years
- Low suspension/expulsion rates
- High attendance rates
- High graduation rates
- No disproportionate racial/ethnic enrollments in gifted or special education
- Other evidence of high achievement



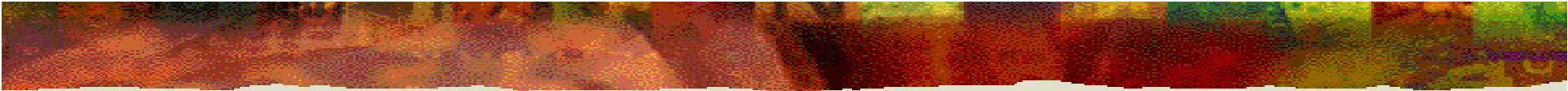
2008 National Excellence in Urban Education Award Winners

- Benjamin Franklin Elem., Bakersfield, CA
- Louisa May Alcott Elem., Cleveland, OH
- William Dandy Middle School, Ft. Lauderdale, FL
- MacArthur High School, Houston, TX (Aldine ISD)
- Benjamin Tucker Elem., Long Beach, CA
- Signal Hill Elem., Long Beach, CA
- Southside Museums Elem., Miami, FL
- Harriet Tubman Elem., Newark, NJ
- Dreamkeepers Academy, Norfolk, VA
- Bridesburg Elem., Philadelphia, PA
- Thomas Henderson Middle School, Richmond, VA



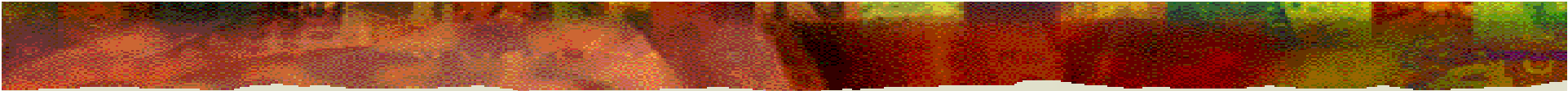
Recent NCUST Award Winners

- Community Day Charter, Lawrence, MA (2006)
- Ginter Park Elementary, Richmond, VA (2006)
- Linwood Elementary, Oklahoma City, OK (2006)
- Muller Elementary, Hillsborough County, FL (2006)
- Whittier Primary School, Peoria, IL (2006)
- Cecil Park Elementary, Mt. Vernon, NY (2007)
- Columbus Alt. High School, Columbus, OH (2007)
- Detroit Edison Academy, Detroit, MI (2007)
- Edison Elementary, Long Beach, CA (2007)
- Gideons Elementary, Atlanta, GA (2007)
- Pillow Elementary, Austin, TX (2007)
- Rancho Cucamonga Middle, Cucamonga, CA (2007)



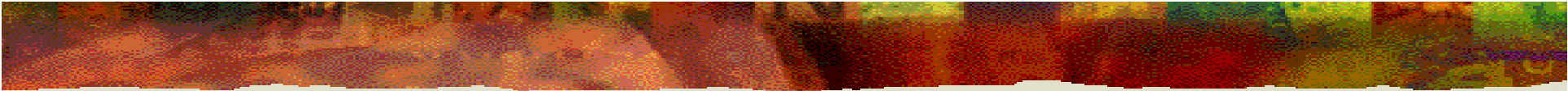
Gideons Elementary School Atlanta, GA

- Enrollment: 550
- 96% African American
- 88% Low-Income
- 96% proficient in reading/language arts
- 94% proficient in mathematics



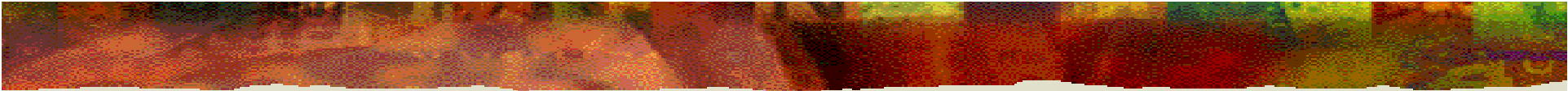
Southside Museums Elementary Miami, FL

- Enrollment: 452
- 83% Latino
- 80% Low-Income
- 57% English learners
- 75% of 5th graders scored at or above grade level in mathematics, compared to 59% statewide



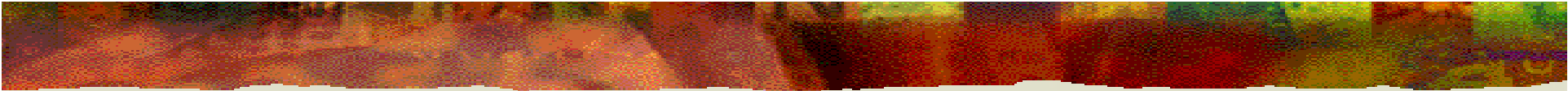
Cecil H. Parker Elementary Mount Vernon, New York

- Enrollment: 450
- 99% African American
- 78% Low-Income
- 91% proficient in reading (increased from 27% to 91% over six years)
- 96% proficient in mathematics



Signal Hill Elementary Long Beach, CA

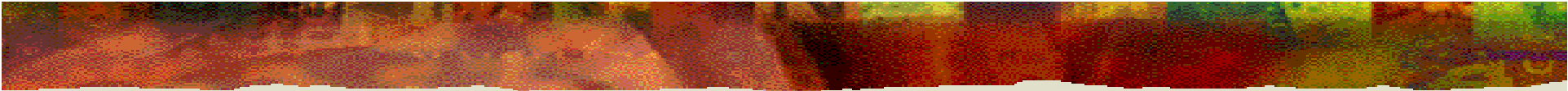
- Enrollment: 756
 - 90% Low-Income
 - 34% English learners
 - State Target for Math in 2007: 26.5% proficient
 - State Performance in 2007: 48.5% proficient
-
- Signal Hill Math Perf. in 2007: 77.4% proficient
 - Signal Hill ELL Math Perf. in 2007: 77.1% proficient
 - Signal Hill SWD Math Perf. in 2007: 41.2% proficient



Thomas Henderson Middle School

Richmond, VA

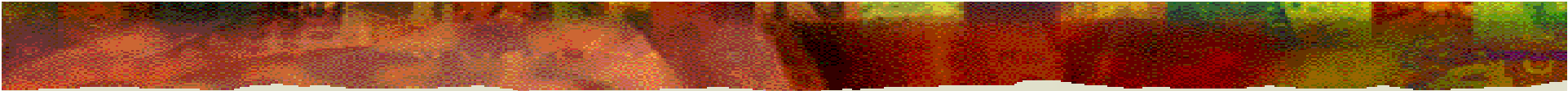
- Enrollment: 545
- 98% Black
- 84% Low-Income
- 73% of 7th graders scored proficient in mathematics, compared to 55% statewide
- 77% of 8th graders scored proficient in mathematics, compared to 77% statewide



Columbus Alternative High School

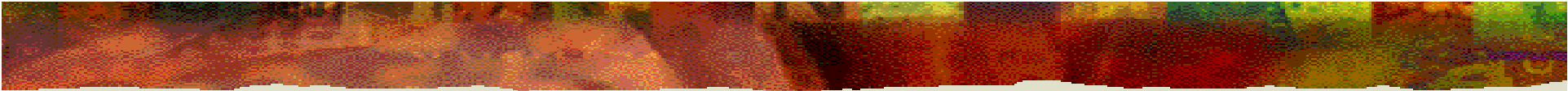
Columbus, OH

- Enrollment: 611
- Grades 9-12
- 60% African American
- 59% low-income
- 97% proficient in reading
- 95% proficient in mathematics
- 82% proficient in science

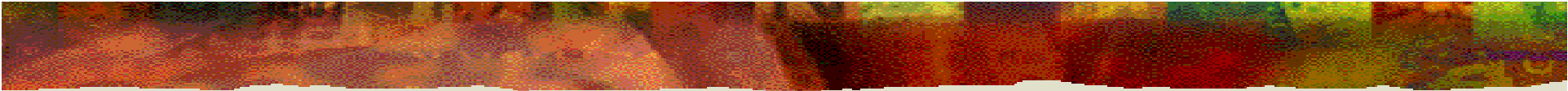


MacArthur High School Houston, TX (Aldine ISD)

- Enrollment: 2,300
- Grades 10-12
- 16% Black
- 79% Latino
- 79% low-income
- 91% passed state assessment in mathematics
- 33% met college/career ready benchmark in mathematics



The National Mathematics Panel's findings are consistent with the best practices observed in many of these high-achieving urban Title I schools.



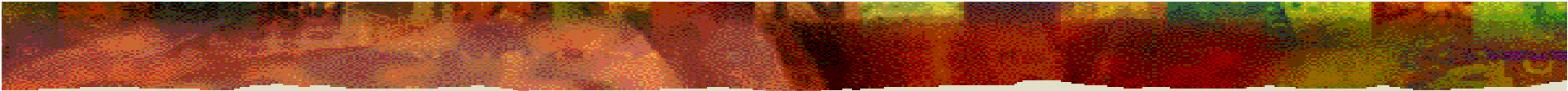
As well, the National Mathematics Panel's findings help explain the differences between the results attained by high-achieving, urban, Title I schools and the results attained by more typical Title I schools.



Curriculum

*“If we don’t teach it, we shouldn’t act surprised if,
at the end of the year, students don’t know it.”*

Principal at a Title I school



High-Achieving Title I Schools Don't Try to Teach Everything

- In typical Title I schools either:
 - The textbook is the mathematics curriculum or
 - Curriculum alignment processes have generated pacing charts designed to ensure that all standards are covered well.
- In contrast, most high-performing Title I schools FOCUS on a limited number of objectives. Educators identify critical standards and focus attention on teaching them well.
- NMAP findings will help these schools better identify critical math standards.



High-Achieving Title I Schools Start Early

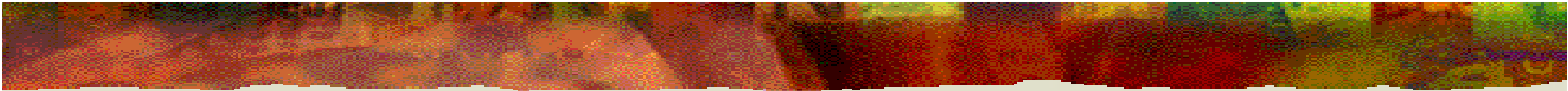
- In typical Title I schools concepts tested at the end of a grade are the focus of instruction throughout that grade level.
- In contrast, most high-performing Title I schools plan vertically in ways that result in elements of complicated concepts and skills being introduced and taught in earlier grades.



Professional Development

“I didn’t know how to teach what I was supposed to teach, but I was the only one who knew that I didn’t know.”

A Title I teacher



High-Achieving Title I Schools Promote Teacher Learning

- In typical Title I schools teachers are reluctant to reveal information about their weaknesses related to content knowledge.
- In contrast, most high-performing Title I schools create a culture in which people feel comfortable admitting their content area weaknesses and seeking help.
- As well, in most high-performing Title I schools, structures make it easy for teachers to deepen their understanding of key content continuously.



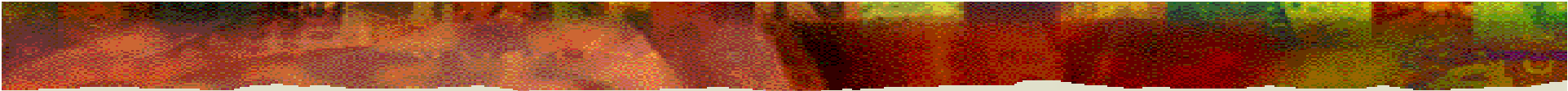
In High-Achieving Title I Schools Professional Development is Focused

- In typical Title I schools, random acts of professional development are common. Teachers commonly spend time learning about a variety of topics. Rarely are teachers able to answer the question, “What are you doing differently now because of the professional development you received?”
- In most high-performing Title I schools, professional development has a clear focus over an extended period of time. Systems are structured to work toward mastery in classroom implementation before moving to the next initiative.



In High-Achieving Title I Schools Teachers Practice & Receive Feedback

- In typical Title I schools, leaders ASSUME that the content learned in professional development sessions will be practiced in classrooms.
- In contrast, in high-performing Title I schools, leaders structure many opportunities for teachers to practice the content learned in actual classroom settings, receive feedback, and practice again.
- As well, in most high-performing Title I schools structures make it easy for teachers to continuously deepen their understanding of key content.



In High-Achieving Title I Schools Collaboration Leads to Better Instruction

- In typical Title I schools, collaboration time has become fashionable. “Professional learning communities” are common; however, they often do not lead to improvements in teaching.
- In most high-performing Title I schools, collaboration time is devoted to solving problems related to improving student learning. Teachers and school leaders come together with an impressive openness to change. They openly share student work and invite each other to critique their teaching. They share their best ideas and build upon each other’s strengths.



Instruction

“To say ‘I taught it, but they didn’t learn it,’ is like a physician saying, ‘I cured him, but he died.’”

Adam Urbanski



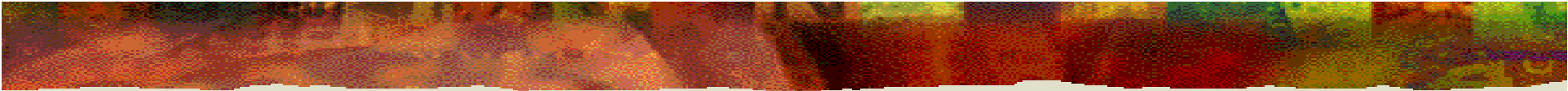
High-Achieving Title I Schools Teach for Learning

- In typical Title I schools, teachers “present” content. When they finish presenting, they have finished teaching.
- In contrast, in most high-achieving Title I schools, teachers are not finished teaching until they have evidence that students understand the content or are able to demonstrate the skills that were the focus of instruction.
- Teachers use a variety of approaches designed to connect with students interests, backgrounds, cultures, and prior knowledge.



High-Achieving Title I Schools Push for Deep Understanding

- In typical Title I schools, teachers often are satisfied when students can complete the algorithm and produce the correct answer.
- In contrast, in most high-achieving Title I schools, teachers focus on helping students produce the correct answer AND help them understand the meaning of the answer and the relevance of the algorithm to life.



High-Achieving Title I Schools Have Timely Systems of Support

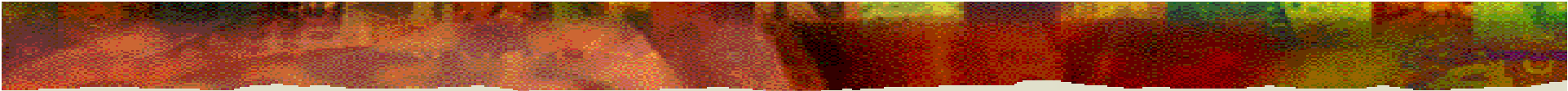
- In typical Title I schools, there are few systematic ways of identifying students who need extra assistance in a timely manner. Even fewer schools have structured systems that have a high likelihood of providing tailored assistance promptly and effectively.
- In contrast, in high-performing schools, systems guarantee that student learning needs are identified promptly. Support systems are evaluated regularly to help increase the likelihood that students receive support that accelerates their learning.



Culture

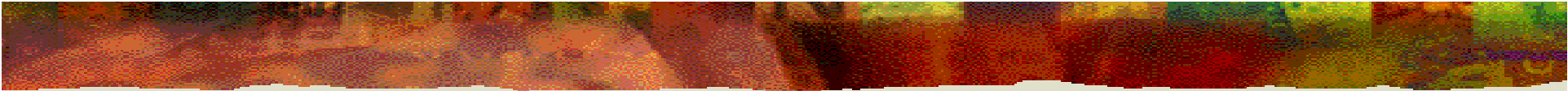
*“Before I care about how much you know, I
want to know how much you care.”*

Ron Ferguson



In High-Achieving Title I Schools Parents Believe Educators Care

- Educators in many typical Title I schools complain that parents are not involved. Apathy and distrust seem to underlie most parent/teacher relationships.
- In the highest performing schools, teachers and parents spend time learning about each other. They learn that they all have the children's best interest at heart. Parents are eager to find ways to support educators who they perceive as eager to find ways to support their children. Educators in these schools give parents new hope for their children's future.



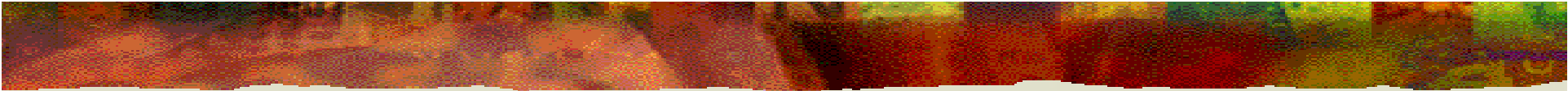
In High-Achieving Title I Schools Everyone is Goal Driven

- Almost all Title I schools have goals, but usually the goals exist to satisfy a requirement for goals. Often, there are many goals on paper, but no goals that influence the daily work of teachers, parents, and students. Sometimes, goals are framed around issues that have little meaning to teachers.
- In high-performing schools, goals generate enthusiasm. There are school goals, grade level goals, department goals, classroom goals, and student goals. Often, people are focused upon only one or two goals at a time. There is excitement as people work together to achieve important goals.



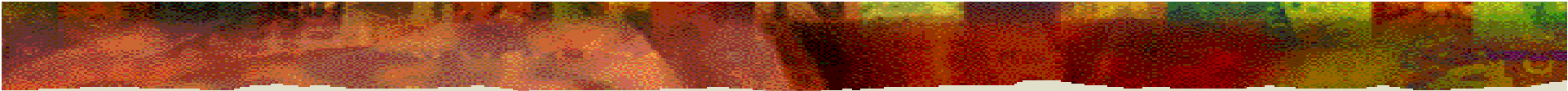
In High-Achieving Title I Schools Everyone is Goal Driven (continued)

- In high-performing schools, leaders make goals real by identifying baselines (for all groups) and charting progress regularly.
- In these schools, leaders find many ways to identify and celebrate small positive steps toward the attainment of goals. Celebration is part of the culture of the school. As a result, teachers come to believe in their capacity to teach, parents come to believe in their capacity to assist, and students come to believe in their capacity to learn and excel.



In High-Achieving Title I Schools Students Are Eager to Work Hard

- Educators in many typical Title I schools complain that students are not “motivated” to work to learn challenging academic content. Behavior problems often interfere with instructional efforts.
- In high-achieving Title I schools, students perceive they are valued and respected by caring educators. Students are proud of their clean and safe schools and the challenging content they are learning. They appreciate the fair implementation of reasonable rules. They are eager to work hard for their teachers.



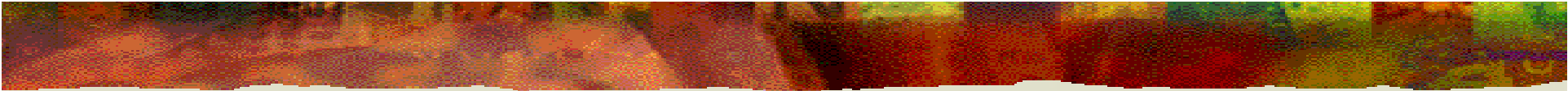
In High-Achieving Title I Schools Students Are Eager to Work Hard (continued)

- In high-achieving Title I schools, educators strive to make learning interesting and fun. They provide a variety of activities during each instructional period. They make wise use of technology that students find motivating.
- In high-achieving Title I schools, students perceive that they are succeeding in learning challenging academic content. They become convinced that they can excel and they increase their effort accordingly.



In High-Achieving Title I Schools Teachers Are Eager to Work Hard

- Teachers in many typical Title I schools feel overburdened, stressed, and under appreciated. Attendance rates are often low and turnover rates are typically high.
- In the highest performing schools, teachers trust that school leaders care sincerely about them. They perceive that leaders are providing the attention, resources, and expertise they need to have a high likelihood of success. Attendance is high and turnover is relatively rare.



In High-Achieving Title I Schools Teachers Are Eager to Work Hard (continued)

- Teachers in many typical Title I schools are “Lone Rangers.” They work solo in their classrooms and try to avoid the many adult issues that tend to consume both time and energy.
- In the highest performing schools, teachers believe they are part of a team that will make a powerful difference in children’s lives. Adult issues are resolved professionally and promptly in a spirit that allows everyone to maintain dignity. Teachers believe in their colleagues, in part, because they perceive that their colleagues believe in them.